

## ABSTRACT

In general, in one aspect, the disclosure describes a method that includes registering a procedure associated with an event, in response to an instruction included in source code for an upstream component, at a downstream component in a packet processing pipeline. The method also includes processing a received packet at the upstream component executing on a first engine, and processing the packet at the downstream component executing on a second engine after the processing of the received packet at the upstream component. The processing at the downstream component includes determining occurrence of the at least one associated event at the downstream component, and in response, executing the registered procedure at the second engine.